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## TCT@ACC-i2: The Interventional Learning Pathway

**MANUAL ASPIRATION THROMBECTOMY (MAT) DOES NOT IMPACT SHORT OR LONG TERM SURVIVAL IN PRIMARY PCI: INSIGHTS FROM THE BLUE CROSS BLUE SHIELD OF MICHIGAN CARDIOVASCULAR COLLABORATIVE (BMC2)**

Poster Contributions

Hall C

Sunday, March 30, 2014, 9:45 a.m.-10:30 a.m.

Session Title: Acute Coronary Syndromes/AMI

Abstract Category: 41. TCT@ACC-i2: Coronary Intervention: Devices

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Authors: Marta Bande, Milan Seth, Daniel Menees, Simon Dixon, Cindy Grines, David Wohns, James Mitchiner, Hitinder S. Gurm, University of Michigan Medical Center, Ann Arbor, MI, USA

**Background:** There are conflicting data on the benefit of manual aspiration thrombectomy (MAT) in patients undergoing primary PCI. The largest study has demonstrated no improvement in early mortality while a recent meta-analysis suggests that use of MAT may be associated with better long term survival.

**Methods:** We assessed the outcome of all patients undergoing primary PCI across 47 hospitals in Michigan between 2010 and 2012 and compared those treated with MAT with those treated with conventional PCI. Propensity matching (PM) was used to adjust for non-randomized use of MAT.

**Results:** Of a total of 12,961 patients, MAT was used in 4972 (38%) and conventional PCI was performed in 7989 (62%). There was no difference in in-hospital mortality in unadjusted (5.5% versus 6.1%) or propensity matched (PM) analysis (5.4% versus 5.7%,  $P = 0.5$ ). MAT was associated (PM) with increases in stroke (0.8% vs 0.5%,  $P = 0.05$ ) and new need for dialysis (0.9% vs 0.5%,  $p = 0.03$ ), and a decrease in post-PCI CABG (PM, 2.6% vs. 3.4%,  $p = .02$ ). Follow up mortality data were available for a subgroup of patients and of these 1024 undergoing MAT were matched to 1024 patients undergoing conventional PCI. No difference in long term survival was observed (figure).

**Conclusions:** The use of MAT does not appear to be associated with a reduction in early or late mortality in patients undergoing primary PCI and routine use of this approach cannot be recommended.

